

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration National Marine Sanctuary System Stellwagen Bank National Marine Sanctuary 175 Edward Foster Rd. Scituate, MA 02055

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13SAC MINUTES

13th SANCTUARY ADVISORY COUNCIL MEETING The State Room, Boston, MA 5 November 2004

MINUTES OF MEETING

PRESENT

Bill Adler Member: Fixed Gear Commercial Fishing

Peter Auster Member: Research

Edward Barrett Member: Mobile Gear Commercial Fishing
Dale Brown (Alternate to Sally Yozell—At-Large)

Deborah Cramer Member: At-Large

Kathleen Dolan (Ex-Officio Member)

William Eldridge Member: Marine Transportation

Susan Farady Member: Conservation Barry Gibson Member: Recreation

Erin Heskett (Alternate to Priscilla Brooks—Conservation)

Jerry Hill Member: Whale Watching

CDR Greg Hitchen (Ex-Officio Member)
Chris Kellogg (Designee for Paul Howard) (Ex-Officio Member)

Judith Pederson (Alternate to Peter Auster—Research)

William Reilly (Alternate to Jerry Hill—Whale Watching)

Kathi Rodrigues (Designee for Patricia Kurkul) (Ex-Officio Member) Susan Snow-Cotter (Ex-Officio Member)

Michael Sosik (Alternate to Barry Gibson—Recreation) Steven Tucker (Alternate to Deborah Cramer—At-Large)

Mason Weinrich Member: Research
Dick Wheeler Member: Education
John Williamson Member: At-Large

SBNMS and NATIONAL PROGRAM STAFF

Craig MacDonald, Superintendent Ben Haskell Nathalie Ward

OTHERS PRESENT

Jennifer Ghiloni, Perot Systems Olivia Free David Bergeron

Timothy Feehan, Perot Systems Rachel Fineman Michael Thompson, Perot Systems



I. Welcome, Review of Agenda and Approval of 12th SAC Minutes (John Williamson)

Welcome and Recognition

Due to traffic issues, John Williamson was not able to open the meeting. In his place, Susan Farady opened the meeting and welcomed all members to the 13th Stellwagen Bank National Marine Sanctuary (SBNMS) Sanctuary Advisory Council (SAC) meeting. Special thanks was given to all members for their attendance and for their dedication to the process. All in attendance were advised that this meeting was being recorded.

Review of Agenda

The agenda was reviewed and accepted by the SAC.

Approval of 12th SAC Minutes

Members of the SAC agreed to postpone making revisions to the 12th SAC Minutes until later in the day. It was indicated that multiple communications of SAC documents made it difficult to keep track of what was needed and because of this, some SAC members did not have adequate time to review the minutes. These members agreed to review the minutes by the afternoon session of the meeting.

The following are revisions to the 12th SAC Minutes, as requested by SAC members during the afternoon session of the 13th SAC Meeting:

• Kathi Rodriguez requested the following to be added under the discussion for <u>Water Quality (WQ)</u> on page 9, second paragraph, last line:

"Additional information to protect water quality can also be referenced in the Magnuson Act."

• Peter Auster requested that the last sentence in the first paragraph under the discussion for Site Characterization (SC) on page 6 read:

"It was also apparent to some SAC members that additional sanctuary staffing was needed to handle the collection, digitation, and integration of datasets, especially where only paper copies of geo-referenced data is concerned."

and that the following be added as the last sentence to the second paragraph on page 12:

"Permitting should be considered for appropriate technical divers as well as charter vessels and archeologists."

and the following sentence be added as the fourth sentence to the last paragraph on page 12:

"It was stressed that there is a need to understand the dynamics of all prey taxa as they effect distribution and abundance of predators. This understanding will assist management within Sanctuary boundaries as well as outside of SBNMS boundaries."

and that the first phrase under **Old SAC Business** — **Approval of 11th SAC Minutes** on page 22 read:

"Revisions to the 11th SAC Minutes were requested by SAC members:.."

and that the following sentence be added to Peter Borrelli's requested change to the 11th

SAC minutes under Old SAC Business—Approval of 11th SAC Minutes on page 22:

"Dr. Nixon discussed that the whale watch industry targets endangered species, noting that the industry is currently not regulated."

• John Williamson requested that the second sentence to the (not the last paragraph on WORD doc) last paragraph on page 12 read:

"It was determined that this was specifically discussed by the EBM WG and that herring fishing was well managed and not conducted at times when whales were present."

And, the following be added after the vote results for Amendment MME.1 on page 18:

"General discussion by the SAC Members offered guidance to the Sanctuary on what should be considered inadequate risk reduction. Whereas the ALWTRP and HPTRP seek to reduce marine mammal mortalities to a biological standard called PBR (potential biological removal), the goal of SBNMS should be to reduce the incidence of marine mammal entanglements in the Sanctuary to as minimal a level as is achievable without creating unreasonable burdens on user groups. The "tools" for the Sanctuary to consider when doing this should be found within the range of fishing gear modification and other management mechanisms available, as well as through outreach, education and behavioral incentives."

• Susan Farady noted that David Pierce was not in attendance on October 21 and should be removed from the attendance list on page 2 and that the last sentence in the second paragraph of the discussion for Interagency Cooperation (IC) on page 10 read:

"Some SAC Members stated that the intent of any MOU should not result in changes to the sanctuary designation document."

and that the second sentence in the third paragraph of the discussion for <u>Ecosystem Alteration</u> (<u>EA</u>) on page 13 read:

"However, some SAC members were concerned that such Actions would be regulations on fishing which could cause a designation document change."

and that the identification of the chair for Marine Mammal Vessel Strike (MMVS) should be changed from Regina Asmutis-Silvia to Mason Weinrich on page 20. Susan Farady also requested that the first sentence of the last paragraph on page 21 read:

"The language in this section should be made consistent with the direction of the SAC to develop regulations rather than relying upon guidelines."

Peter Auster moved to accept the minutes of the 12th SAC Meeting as amended. (*MOTION*) The motion was seconded by William Eldridge.

This motion was carried with the following voting results (see Appendix A for voting record):

Yea: 13Nay: 0Abstain: 0

II. Sanctuary Report (Craig MacDonald)

Before providing the Sanctuary Report, Craig MacDonald addressed a technical inaccuracy in the language used for the Marine Mammal Vessel Strike (MMVS) Action Plan, Strategy MMVS.C.1, Activity C.1.1. that states, "...should implement methods to enforce current guidelines." Although the language is not open for discussion on changes, it was noted that the intent of the SAC, based on the last meeting, was that the Actions listed under this activity were to be given consideration. The sanctuary legally cannot enforce guidelines, but should seek to increase compliance with guidelines while regulations are being developed. It was indicated by SAC Members that the 12th SAC Minutes did address the concerns associated with the activity and that the language was consistent with the intent of the SAC.

<u>Discussion:</u> Some SAC Members discussed the language inaccuracy. They were concerned that current guidelines are ineffective, given the current circumstances facing the whale watch fleet. Increased compliance with guidelines that do not work would be impractical. These members stated that guidelines should be revised. However, other SAC Members indicated that the current guidelines were developed with stakeholder involvement and that the MMVS Working Group (WG) considered the guidelines, as written, adequate to protect whales from collisions with whale watch vessels. It was indicated by other SAC Members that the guidelines were developed originally by NOAA Fisheries, therefore a process existed for open discussion on guideline revision.

Sanctuary Report

Craig MacDonald provided a brief report on the sanctuary. Thanks were given to SBNMS staff and Perot Systems Government Services staff for their work and support of the SAC meetings. The budget was the only issue that needed to be reported on. The sanctuary is operating under a Continuing Resolution of Congress, with the expectation that a new budget would be in place by January 2005. Due to the Continuing Resolution, current spending is restricted to maintenance and essential needs.

III. Council Announcements (John Williamson)

John Williamson called for the following announcements:

Annual Chair and Coordinator's Meeting Report, 2004 (Susan Farady)

Susan Farady provided a brief summary of the Chair and Coordinator's Meeting for 2004. This meeting was held in Savannah, GA, and was sponsored by Gray's Reef National Marine Sanctuary. All the National Marine Sanctuaries were represented. This meeting centered on case studies from other sanctuaries, which are currently undergoing the same Management Plan Review process and are dealing with many similar issues. The case studies included the following issues:

- Vessel Collisions
- Designation
- SAC Communication
- Dedicated Research Areas
- Zoning Process
- Sanctuary Boundary
- Management Plan Process
- Marine Reserves
- Cruise Ships
- Water Quality

The National Marine Sanctuary Program is currently trying to establish policies across all the sanctuaries. Policy topics included:

- Telecommunication Cables
- Cruise Ships
- Zoning Schemes

Motorized personal watercraft will be an issue that is to be addressed at the next meeting in 2005.

During public comment at the 2004 meeting, the Blue Water Network presented information concerning cruise ship discharge. This prompted the International Council of Cruise Lines (ICCL) to present information. Both groups desired a vote on cruise ship discharge issues. Members of the Chair and Coordinator's Meeting were un-willing to allow a vote, as each individual sanctuary did not have a chance to address the issues.

International groups presented material to provide an international perspective on sanctuary issues. Groups from Canada, Australia and the U.S. National Parks Service provided information.

SAC Issues — Chair and Coordinator's Meeting: February 2005 (John Williamson)

John Williamson observed that Susan Farady's experience at the last Chair and Coordinator's meeting was similar to his own past experiences. The National Program is attempting to create policies and guidelines to provide consistency across all sanctuaries on particular issues. The issues to be discussed at the next meeting are:

- Cruise Ships
- Marine Preserves
- Aquaculture
- Bio-Prospecting

Unfortunately, the issues are difficult for the Chairs and Coordinators to address since the issues being dealt with are poorly defined at the SAC and WG level and each individual sanctuary wants local/regional control over these issues; therefore, no position will be taken on issues not clearly defined by the SAC. Such issues will be brought before the SAC for clarification.

SAC Membership Recruitment (Nathalie Ward)

Two vacancies exist for SAC Alternates for the Education Seat and for the Business and Industry Seat. A formal recruiting process will begin again to fill these seats. SAC Members are encouraged to provide recommendations; however, it is essential that no overlap exists with other existing seats.

• Election of Officers (Nathalie Ward)

Election of officers will occur at the 15 February meeting. John Williamson has completed one term as Chair and eligible for another term; Sally Yozell has completed two terms as Vice-Chair, therefore no longer eligible for that position; and Susan Farady has completed one term as Secretary (position voted on annually and she is eligible for reelection).

2005 SAC Dates (Nathalie Ward)

Polling was conducted to determine the dates for the next two meetings.

• February SAC Meeting Date

The 14th meeting of the SAC is set for February 15, 2005. Elections will be held for the Executive Committee. Notice will be sent to all SAC Members with further details. This meeting will also consist of constituent reports and SBNMS Staff presentations on data reported at WG meetings.

SAC Members were concerned with the momentum behind the LNG mooring site proposal. The process was moving quickly and the February meeting would be the best time to discuss it. It was agreed that all SAC Members should forward information on the status of the LNG proposal to Craig MacDonald and Ben Cowie-Haskell.

• June SAC Meeting Date

The 15th meeting of the SAC is set for June 9, 2005.

Constituent Reports (Nathalie Ward)

Nathalie Ward provided a brief explanation on what constituent reports were and what the format for these reports would be. These reports provide input from Members or Alternates on the constituent point of view. Two, 10-minute constituent reports are slated for each SAC meeting. She requested that anyone wishing to provide a report should contact her by mid-January.

There is also time for lunch presentations. The SAC is encouraged to provide recommendations on lunchtime speakers and topics.

IV. SAC Business (John Williamson)

Old Business—Compatibility Determination WG

The Compatibility Determination (CD) WG has not yet met. The National Program is currently assembling a background information document to be used by this WG. This background document should be completed by Thanksgiving of this year. It is hoped that the CD WG membership will be filled by this time as well. Ben Cowie-Haskell will serve as Team Lead. Those who were originally chosen and accepted for CD WG seats will be asked again if they are still willing to serve. If more members are needed, the Executive Committee will revisit the original recommendations from the SAC. A full recruitment procedure is not recommended.

The charge of this WG is not to determine what is or is not a compatible use within the SBNMS. This WG will be tasked with providing guidelines on the determination of compatible use and produce a "white paper" document similar in form to the report produced by the Site Characterization (SC) WG document. As with other sanctuaries going through this same process, the National Program will review the guidelines that are produced. It is expected that this WG will meet a number of times before the February 15, 2005 meeting of the SAC where a status report will be given. This WG should be completed by the 9 June 2005 SAC meeting. Summaries for each meeting of the CD WG will be available to all SAC members and the public.

New Business—Zoning WG

Based on the recommendations presented at the 12th SAC Meeting in the Ecosystem-Based Management (EBM) Action Plan, a draft Zoning WG proposal was developed by sanctuary staff (see Appendix B for the proposal as amended by the SAC). Some SAC Members desired to put off discussion of the Zoning WG until after Action Plan Strategies were prioritized, because if the Strategy recommending the Zoning WG was not chosen, there would be no need for discussion. However, the SAC was reminded that the sanctuary is not bound to act on all recommendations contained in the Action Plans. The vote on Strategy prioritization is to weigh those recommendations that are important. Other Strategies will not necessarily be dropped, as they may be used as a range of alternatives during the NEPA process. NOAA ultimately will decide what will be included in the Management Plan, which will then be made available for public comment.

William Adler moved to delay discussion of the Zoning WG proposal until after Strategy prioritization was complete. (*MOTION*) The motion was seconded by Edward Barrett.

This motion was carried with the following voting results (see Appendix A for voting record):

Yea: 7Nay: 0Abstain: 6

The following is a summary of the Zoning WG discussion that followed the Strategy prioritization voting process:

<u>Discussion:</u> The membership of the proposed Zoning WG was discussed by SAC Members {Craig MacDonald, William Adler, Edward Barrett, Susan Farady, Peter Auster, John Williamson, Mason Weinrich, Dale Brown, Jerry Hill, Barry Gibson, Chris Kellogg, Kathi Rodriguez, Deborah Cramer, Erin Heskett, and Susan Snow-Cotter}. The Zoning WG would have the same operating procedures and ground rules as all the other WGs. The Zoning WG seats are based on the Ecosystem-Based Management (EBM) WG, with the addition of some seats. The Zoning WG proposal was worded to be consistent with the formation of a Zoning Working Group recommendation from the EBM Action Plan.

Some SAC Members were concerned that defining terms such as "diversity" and "ecological integrity" were necessary before the Zoning WG could meet. These terms should have a range of optional definitions prepared by a sub-group of experts with a wide range of expertise. It was agreed that this technical sub-group could be comprised of technical advisors and would be created as the first charge of the Zoning WG. The sub-group would come up with two or three operational definitions of ecological integrity with measurable parameters.

The Zoning WG will evaluate the existing zoning schemes based on agreed criteria associated with the scientific requirements and goals of ecosystem-based sanctuary management and make recommendations to the SAC and the Sanctuary on the adequacy of existing zoning schemes, If necessary, the Zoning WG would recommend a modified zoning scheme including a consideration of no-take marine reserves, and continue to develop a modified zoning scheme.

SAC Members deliberated over what seats should be included in the Zoning WG. There was concern over the total number of seats for the WG and equitable representation. Too many would make the WG unmanageable; however, a reasonably large number was needed to cover all interests and equalize voting opportunity. Some SAC members raised concern that charter fishing should have separate representation and not be grouped into recreational fishing. Conservation groups, scientists, the public-at-large and appropriate government agencies needed to be well represented as well. Appendix B lists the Zoning WG process and seats approved by the SAC.

Jerry Hill moved to accept the membership of the proposed Zoning WG. (MOTION) The motion was seconded by William Eldridge.

This motion was carried with the following voting results (see Appendix A for voting record):

Yea: 13Nay: 0Abstain: 0

V. MPR Action Plan Synthesis (Craig MacDonald)

When assembling the Management Plan, the sanctuary will have the discretion to use all, or parts of all, Action Plans. The results of SAC voting for Strategies and the identification of important Activities will provide direction to the sanctuary during this process. It is important for SAC Members to note the changes in each Action Plan that were made at the request of the SAC at the last meeting.

VI. Instructions Provided (Craig MacDonald)

Strategy Prioritization: 3 green dots

The first task is to prioritize Strategies. There are 10 Action Plans with a total of 74 strategies. Each SAC Member will be given 3 dots per Action Plan (i.e., a total of 30 dots). Of the 3 dots, two must be used to vote for Strategies within each Action Plan. <u>ONE</u> dot is a "wild card" or "wild dot." If wished, the wild dots can be banked and applied to Strategies in <u>any</u> Action Plan. This procedure enables the SAC to prioritize Strategies while simultaneously weighting the Action Plans.

Charts listing all Strategies and Activities for each Action Plan were posted on the walls of the meeting room for the group to collectively engage in this activity. Dots can be applied, moved, and reapplied during the voting process. The dots will be tallied immediately after prioritization of the Strategies, the sums ranked, and the summary results presented.

Activity Preferences: 10 blue dots

Next, SAC Members will indicate the Activities that each Member would like the sanctuary to remain mindful of as it drafts the Management Plan. For instance, some important Activities may not be associated with the Strategies considered high priority. There are 10 Action Plans with a total of 233 Activities. Each SAC Member will be given 10 blue dots total. Please assign <u>ONE</u> dot to each chosen Activity.

Activity preferences will be indicated by placing dots on the wall charts as was done for Strategy prioritization. Multiple dots assigned to an Activity will not constitute a measure of priority. As in public scoping, this is not a voting exercise, but rather a way to note activities of importance. Dots will not be tallied, and Activities will not be ranked. Summary results will be presented.

VII. Strategy Prioritization for Action Plans ADMIN, POE, IC, WQ, MHR, EBM, EA, MME, MMBD, MMVS

The results of strategy prioritization as voted by the SAC, based on the above directions, are listed in Appendix C. The top ten Strategies across all Action Plans were ranked based on total votes (See Appendix D). Tied ranks resulted from cases where multiple Strategies received the same number of votes. The top ten Strategies were grouped by Action Plan (Appendix E). The resulting ranking by total vote conveys a sense of the relative importance of the different Action Plans.

Jerry Hill moved to accept the SAC recommendation for Strategy prioritization. (*MOTION*) The motion was seconded by Susan Farady.

This motion was carried with the following voting results (see Appendix A for voting record):

Yea: 13Nay: 0Abstain: 0

VIII. Preferred Activities by Action Plans

The Membership of the SAC was asked to identify Activities of importance based on the instructions given above. See Appendix F for the results.

IX. Public Comment

No public comment was given.

X. 13th SAC Meeting Adjourned

The 13th SAC Meeting was Adjourned at 5:00 PM

SUMMARY of MOTIONS

<u>5 November 2004</u>

- MOTION to accept the minutes of the 12th SAC Meeting as amended.
- MOTION to delay discussion of the Zoning WG proposal until after Strategy prioritization was complete.
- MOTION to accept the membership and process of the proposed Zoning WG.
- MOTION to accept the SAC recommendation for Strategy prioritization.

APPENDIX A

SAC Voting Record, November 5, 2004

SBNMS SAC Action Plan Review Voting Sheet

MOTION to postpone establishment of Zoning WG until after prioritization exercise.

Last	First	SAC Designation	Yea	Nay	Abstain
Adler	William	SAC Member	X		
Auster	Peter	SAC Member			X
Barrett	Edward	SAC Member	X		
Borrelli	Peter	SAC Member	Absent		
Brown	Dale	SAC Alternate	X		
Cramer	Deborah	SAC Member			X
Eldridge	Bill	SAC Member	X		
Farady	Susan	SAC Member			X
Gibson	Barry	SAC Member	X		
Heskett	Erin	SAC Alternate			X
Hill	Allen (Jerry)	SAC Member	X		
Kent, III	Jackson	SAC Member	Absent		
Weinrich	Mason	SAC Member			X
Wheeler	Richard	SAC Member	X		
Williamson	John	SAC Member			X

Totals: 7 0 6

SBNMS SAC Action Plan Review Voting Sheet

MOTION to accept proposed makeup of the Zoning Working Group.

Last	First	SAC Designation	Yea	Nay	Abstain
Adler	William	SAC Member	X		
Auster	Peter	SAC Member	X		
Barrett	Edward	SAC Member	X		
Borrelli	Peter	SAC Member	Absent		
Brown	Dale	SAC Alternate	X		
Cramer	Deborah	SAC Member	X		
Eldridge	Bill	SAC Member	X		
Farady	Susan	SAC Member	X		
Gibson	Barry	SAC Member	X		
Heskett	Erin	SAC Alternate	X		
Hill	Allen (Jerry)	SAC Member	X		
Kent, III	Jackson	SAC Member	Absent		
Weinrich	Mason	SAC Member	X		
Wheeler	Richard	SAC Member	X		
Williamson	John	SAC Member	X		

Totals: 13 0 0

SBNMS SAC Action Plan Review Voting Sheet

MOTION for SAC recommendation for Strategies prioritization.

Last	First	SAC Designation	Yea	Nay	Abstain
Adler	William	SAC Member	X		
Auster	Peter	SAC Member	X		
Barrett	Edward	SAC Member	X		
Borrelli	Peter	SAC Member	Absent		
Brown	Dale	SAC Alternate	X		
Cramer	Deborah	SAC Member	X		
Eldridge	Bill	SAC Member	X		
Farady	Susan	SAC Member	X		
Gibson	Barry	SAC Member	X		
Heskett	Erin	SAC Alternate	X		
Hill	Allen (Jerry)	SAC Member	X		
Kent, III	Jackson	SAC Member	Absent		
Weinrich	Mason	SAC Member	X		
Wheeler	Richard	SAC Member	X		
Williamson	John	SAC Member	X		

Totals: 13 0 0

SBNMS SAC Action Plan Review Voting Sheet

MOTION to accept the 12th SAC Meeting Minutes as amended.

Last	First	SAC Designation	Yea	Nay	Abstain
Adler	William	SAC Member	X		
Auster	Peter	SAC Member	X		
Barrett	Edward	SAC Member	X		
Borrelli	Peter	SAC Member	Absent		
Brown	Dale	SAC Alternate	X		
Cramer	Deborah	SAC Member	X		
Eldridge	Bill	SAC Member	X		
Farady	Susan	SAC Member	X		
Gibson	Barry	SAC Member	X		
Heskett	Erin	SAC Alternate	X		
Hill	Allen (Jerry)	SAC Member	X		
Kent, III	Jackson	SAC Member	Absent		
Weinrich	Mason	SAC Member	X		
Wheeler	Richard	SAC Member	X		
Williamson	John	SAC Member	X		

Totals: 13 0 0

APPENDIX B

Approved Zoning Working Group Process and Composition

13 SAC 11/5/04

A. Process

- 1. Zoning WG convenes and assigns a subgroup to come up with 2-3 operational definitions of ecological integrity with measurable parameters
- 2. Subgroup makes recommendation on definition of integrity
- 3. Zoning WG evaluates existing zoning scheme based on agreed upon criteria associated with the scientific requirements and goals of EBSM.
- 4. Zoning WG makes recommendation to SAC on adequacy of existing zoning scheme
- 5. SAC makes recommendation to superintendent on adequacy of existing zoning scheme and future of Zoning WG
- 6. If necessary, Zoning WG continues deliberations to develop a modified zoning scheme (including a consideration of fully protected reserves) for the purpose of meeting the scientific requirements and goals of EBSM within 2 years of final management plan implementation.

B. Composition

SAC Member Chair (1)

SBNMS Staff Lead (1)

Academics (3)

Fishing Industry (3)

Mobile

Fixed

Mid-water

Recreational Fishing (2)

Charter

Personal

Conservation (3)

At-large (1)

NMFS (2)

Mass DMF (1)

Mass CZM (1)

NEFMC (technical advisor)

Total Membership (18)

APPENDIX C

Action Plan Strategy Prioritization

Working Group	Strategy	Vote
ЕВМ	Understand Ecosystem Structure and Function	22
MME	Aiding Disentanglement Efforts	19
ЕВМ	Protect Ecological Integrity	18
MMVS	The Sanctuary Should Reduce the Risk of Vessel Strike Between Large Commercial Ships and Baleen Whales (Additional to or Including Right Whales)	18
POE	Establish an Outreach Campaign to the General Public to Increase Sanctuary Visibility, Awareness and Stewardship	13
WQ	Develop a Water Quality Monitoring Plan	13
MMBD	Establish Protocols for Vessels in the Vicinity of Whales	13
ADMIN	Improve Overall Site Staffing and Support Capabilities	12
MMBD	Establish Protocols for Noise Disturbance in the Vicinity of Whales	12

ADMIN	Maintain and Enhance Infrastructure of the Site	11
EA	The Sanctuary Should Develop a Plan Focused on the Ecosystem Impacts of Biomass Removal by Fishing Activity	11
POE	Develop and Implement an Interpretive Facilities and Signage Program	10
IC	Re-Establish Discussions Regarding a Possible Memorandum of Understanding (MOU) Between The National Oceanic and Atmospheric Association (NOAA)/SBNMS and the NOAA Fisheries, Northeast Regional Office (NERO) and the New England Fishery Management Council (NEFMC) to Facilitate Cooperation and Coordination.	10
MHR	Protect and Manage MHR	10
ЕВМ	Establish a Collaborative Research Consortium	10
EA	The Sanctuary Should Develop a Plan Focused on Alteration of Benthic Habitat by Mobile Fishing Gears	10
MHR	Establish a MHR Program	9
MME	Reduction of Marine Mammal Interaction with the Gillnet Fishery	9
IC	Establish a Protocol Between NOAA/SBNMS and the NOAA Fisheries, Northeast Fisheries Science Center (NEFSC) to Facilitate, as Appropriate, Permitting and Cooperative Research	8
ЕВМ	Evaluate the Need and Feasibility for Modifying the Sanctuary Boundary	8

EA	The Sanctuary Should Develop a Plan Focused on the Ecosystem Impacts of Ocean Dumping, the Disposal of Dredged Materials and Mariculture	8
ADMIN	Develop a SBNMS Friends Group	7
WQ	Reduce Impacts of Municipal and Other Shore-Based Wastewater Streams	7
EA	The Sanctuary Should Develop a Plan Focused on the Ecosystem Impacts of the Laying of Cables and Pipelines within the SBNMS	7
MMVS	The Sanctuary Should Seek Ways to Regulate Whale Watching within Its Jurisdiction	7
WQ	Encourage Placement of Oceanographic Monitoring Stations in SBNMS and Integrate Monitoring Stations into Site Characterization Research Planning	6
wQ	Reduce Threats to Sanctuary Water Quality from Vessel Wastewater Discharges (Other than Ballast Water)	6
MHR	Inventory, Assess, and Characterize MHR	6
MHR	Develop and Implement a MHR Outreach and Education Program	6
MMVS	Outreach and Education	6
POE	Develop and Implement Public Outreach Programs for User Groups	5

POE	Establish a Media Education and Outreach Program	5
ММЕ	Reduction of Marine Mammal Interaction with the Trap/Pot Fishery	5
MMBD	Establish Protocols for Aircraft Overflight in the Vicinity of Whales	5
POE	Develop and Implement a Sanctuary-Certified Interpreter Program	4
POE	Leverage Partnerships to Build Capacity for Formal and Informal Education and Public Outreach	4
wQ	Develop Contingency Plans to Address Actions and Responsibilities to Remediate Catastrophic Water Quality Events in the Sanctuary and Support Programs that Prevent Water Pollution Events	4
POE	Develop a K-12 Education Program	3
WQ	Reduce Ballast Water exchanges in the Sanctuary	3
IC	Participate on Relevant Advisory Panels (e,g, Habitat, Groundfish, Herring) of the NEFMC.	3
MMVS	Research	3
ADMIN	Develop a comprehensive Volunteer Plan/Program to Support Sanctuary Projects	2

ADMIN	Assess Emerging Issues	2
POE	Develop an Adult Education Program	2
IC	Establish a SBNMS Webpage that Serves as a Clearinghouse for Fisheries Regulations by Providing the Web Links to Appropriate Regulatory Agency	2
IC	Continue Cooperative Enforcement Program by Maintaining and Updating Cooperative Enforcement Agreement with NOAA Office of Law Enforcement (OLE), Massachusetts Environmental Police, and USCG	2
EA	The Sanctuary Should Continue the WG Process to Address the Remaining Issues Assigned to the EA WG	2
MMVS	Enforcement	2
WQ	Develop a Water Quality Outreach and Education Program	1
IC	Establish a SBNMS Webpage that Depicts Agency Jurisdictions in the SBNMS and Serves as a Clearinghouse for Agency Contact Information	1
IC	Establish a Mechanism for Informal Consultation with the EPA, NEFMC, Massachusetts Water Resources Authority (MWRA), Massachusetts Department of Environmental Protection (MADEP) and the Massachusetts Coastal Zone Management (MACZM) Office on Water Quality Issues	1
IC	Convene Annual or Biannual Meetings of the Interagency Working Group or As Needed	1
IC	Participate in the GOM Council and Other Regional Initiatives	1

MHR	Assess Shipwrecks and Other Submerged Objects for Potential Hazards	1
ЕВМ	Establish a Research Steering Committee	1
ЕВМ	Establish an Information Management Program	1
ММЕ	Enforcement of Measures Aimed at Reducing Interactions of Marine Mammals with Fisheries	1
MMVS	The Sanctuary Should Institute Voluntary Speed Restrictions for Vessels Other Than Large Commercial Ships to Mitigate Vessel Strikes to Marine Mammals	1
ADMIN	Performance Evaluation	0
POE	Develop an Undergraduate and Graduate Education Program	0
wQ	Evaluate the Use and Utility of Models for Sanctuary Management	0
IC	Establish a Protocol for Coordination on Proposed Activities with the NOAA Fisheries/NERO	0
IC	Evaluate the Memorandum of Agreement (MOA) Between the U.S. Army Corps of Engineers (USACE) and NOAA Fisheries for Commenting on Proposed Activities Occurring at the Massachusetts Bay Disposal Site (MBDS).	0
IC	Establish a Protocol with NOAA Fisheries NEFSC for Consultation on Proposed Activities Occurring at the MBDS Proposed for Permitting or Proposed by the USACE.	0

IC	Provide Updates to the USCG Area Contingency Plans on a Regularly Scheduled Basis	0
IC	Share Results of Cooperative Research within Sanctuary Boundaries with the Public and Other Interested parties Via the Web	0
IC	Share Results of Cooperative Research within Sanctuary Boundaries with the Public and Other Interested parties Via the Web	0
IC	Share Results of Cooperative Research within Sanctuary Boundaries with the Public and Other Interested parties Via the Web	0
ММЕ	SBNMS Emerging Issues	0
ММЕ	Emerging Issues for the Sink Gillnet Fishery	0
MMBD	Establish Protocols for Fishing Activities in the Vicinity of Whales	0
MMVS	The Sanctuary Should Reduce the Risk of Vessel Strike Between Large Commercial Ships and Right Whales	0
MMVS	The Sanctuary Should Institute Voluntary Speed Restrictions for Large Commercial Ships to Mitigate Vessel Strikes to Marine Mammals	0
MMVS	Emerging Issues	0

APPENDIX D

Action Plan Strategy Top 10

Workin g Group	Strategy	Vote
EBM	Understand Ecosystem Structure and Function	22
MME	Aiding Disentanglement Efforts	19
EBM	Protect Ecological Integrity	18
MMVS	The Sanctuary Should Reduce the Risk of Vessel Strike Between Large Commercial Ships and Baleen Whales (Additional to or Including Right Whales)	18
POE	Establish an Outreach Campaign to the General Public to Increase Sanctuary Visibility, Awareness and Stewardship	13
WQ	Develop a Water Quality Monitoring Plan	13
MMBD	Establish Protocols for Vessels in the Vicinity of Whales	13
ADMIN	Improve Overall Site Staffing and Support Capabilities	12
MMBD	Establish Protocols for Noise Disturbance in the Vicinity of Whales	12
ADMIN	Maintain and Enhance Infrastructure of the Site	11
EA	The Sanctuary Should Develop a Plan Focused on the Ecosystem Impacts of Biomass Removal by Fishing Activity	11
POE	Develop and Implement an Interpretive Facilities and Signage Program	10
IC	Re-Establish Discussions Regarding a Possible Memorandum of Understanding (MOU) Between The National Oceanic and Atmosheric Association (NOAA)/SBNMS and the NOAA Fisheries, Northeast Regional Office (NERO) and the New England Fishery Management Council (NEFMC) to Facilitate Cooperation and Coordination.	10
MHR	Protect and Manage MHR	10
EBM	Establish a Collaborative Research Consortium	10
EA	The Sanctuary Should Develop a Plan Focused on Alteration of Benthic Habitat by Mobile Fishing Gears	10
MHR	Establish a MHR Program	9
MME	Reduction of Marine Mammal Interaction with the Gillnet Fishery	9
IC	Establish a Protocol Between NOAA/SBNMS and the NOAA Fisheries, Northeast Fisheries Science Center (NEFSC) to Facilitate, as Appropriate, Permitting and Cooperative Research	8
EBM	Evaluate the Need and Feasibility for Modifying the Sanctuary Boundary	8
EA	The Sanctuary Should Develop a Plan Focused on the Ecosystem Impacts of Ocean Dumping, the Disposal of Dredged Materials and Mariculture	8

ADMIN	Develop a SBNMS Friends Group	7
WQ	Reduce Impacts of Municipal and Other Shore-Based Wastewater Streams	7
EA	The Sanctuary Should Develop a Plan Focused on the Ecosystem Impacts of the Laying of Cables and Pipelines within the SBNMS	7
MMVS	The Sanctuary Should Seek Ways to Regulate Whale Watching within Its Jurisdiction	7

APPENDIX E

Top 10 By Action Plan

Working Group	Strategy	Vote	Total Vote
EBM	Understand Ecosystem Structure and Function	22	58
EBM	Protect Ecological Integrity	18	
EBM	Establish a Collaborative Research Consortium	10	
EBM	Evaluate the Need and Feasibility for Modifying the Sanctuary Boundary	8	
EA	The Sanctuary Should Develop a Plan Focused on the Ecosystem Impacts of Biomass Removal by Fishing Activity	11	
EA	The Sanctuary Should Develop a Plan Focused on Alteration of Benthic Habitat by Mobile Fishing Gears	10	
EA	The Sanctuary Should Develop a Plan Focused on the Ecosystem Impacts of Ocean Dumping, the Disposal of Dredged Materials and Mariculture	8	36
EA	The Sanctuary Should Develop a Plan Focused on the Ecosystem Impacts of the Laying of Cables and Pipelines within the SBNMS	7	
ADMIN	Improve Overall Site Staffing and Support Capabilities	12	
ADMIN	Maintain and Enhance Infrastructure of the Site	11	30
ADMIN	Develop a SBNMS Friends Group	7]
MME	Aiding Disentanglement Efforts	19	20
MME	Reduction of Marine Mammal Interaction with the Gillnet Fishery	9	28
MMBD	Establish Protocols for Vessels in the Vicinity of Whales	13	25
MMBD	Establish Protocols for Noise Disturbance in the Vicinity of Whales	12	25
MMVS	The Sanctuary Should Reduce the Risk of Vessel Strike Between Large Commercial Ships and Baleen Whales (Additional to or Including Right Whales)	18	25
MMVS	The Sanctuary Should Seek Ways to Regulate Whale Watching within Its Jurisdiction	7	
POE	Establish an Outreach Campaign to the General Public to Increase Sanctuary Visibility, Awareness and Stewardship	13	23
POE	Develop and Implement an Interpretive Facilities and Signage Program	10	
WQ	Develop a Water Quality Monitoring Plan	13	20
WQ	Reduce Impacts of Municipal and Other Shore-Based Wastewater Streams	7	

MHR	Protect and Manage MHR	10	19
MHR	Establish a MHR Program	9	
IC	Re-Establish Discussions Regarding a Possible Memorandum of Understanding (MOU) Between The National Oceanic and Atmospheric Association (NOAA)/SBNMS and the NOAA Fisheries, Northeast Regional Office (NERO) and the New England Fishery Management Council (NEFMC) to Facilitate Cooperation and Coordination.	10	18
IC	Establish a Protocol Between NOAA/SBNMS and the NOAA Fisheries, Northeast Fisheries Science Center (NEFSC) to Facilitate, as Appropriate, Permitting and Cooperative Research	8	

APPENDIX F

Preferred Activities by Action Plans

Workin g Group	Activity
ADMIN	(2.1) Maintain and acquire vessels as necessary.
ADMIN	(2.6) Enhance enforcement activities at the sanctuary.
ADMIN	(2.7) Expand patrol-related outreach and interpretive enforcement efforts.
ADMIN	(3.1) Support the creation of a SBNMS Friends Group.
ADMIN	(5.1) Assess opportunities for federal, state and local government grants as well as foundation grants.
ADMIN	(5.3) Seek Involvement with future broad policy initiatives emerging from the Pew Ocean Report and the Draft Report of the U.S. Commission on Ocean Policy.
POE	(1.1) Assess the level of public awareness of the sanctuary and the communication tools that have proven to be most productive to date for the sanctuary and similar sites.
POE	(1.3) Produce annual newsletter, and other periodic publications to provide information to the general public, legislators, and user groups.
POE	(1.4) Develop a website that provides a central location for all information about the sanctuary and links to affiliated organizations. The web site provides "one-stop shopping" for any information need from any user group or member of the general public.
POE	(2.2) Develop visitor centers/exhibits in gateway cities, including but not limited to Gloucester, Boston and Provincetown, to heighten sanctuary visibility and to encourage responsible stewardship by those individuals traveling to the sanctuary.

РОЕ	(2.5) Develop and install (if appropriate) signage at sanctuary departure points, including, but not limited to, marinas, boat ramps, cruise ship terminals, fuel docks, and pumping stations, to raise awareness of the sanctuary and protect its resources, particularly water quality and marine mammals.
РОЕ	(3.1) Create an outreach panel consisting of outreach specialists from the various user groups, as well as experts in public relations, advertising, and marketing. Meet on an as-needed basis, and provide electronic communication between sanctuary and outreach experts.
РОЕ	(4.2) Develop criteria for a sanctuary volunteer docent program that coordinates with the whale watch naturalist certification program. The docent program will provide a corps of knowledgeable volunteers who will represent the sanctuary at public events and other outreach functions.
РОЕ	(4.3) Develop a full semester college course on sanctuary resources and management that provides the background information necessary for the whale watch naturalist and docent certifications. Make classes available via digital video disk (DVD) and video home systems (VHS) tapes for distance learning purposes.
POE	(4.4) Develop a website that provides all background information in the whale watch naturalist and docent education program. Update the site as necessary to keep certified individuals updated on any changes and provide the latest information to new learners.
POE	(4.5) Develop and implement information update and rewards programs for certified interpreters and docents.
РОЕ	(5.3) Prepare advisories, press releases and articles on a timely basis for distribution to the media; produce and distribute still and video images when appropriate; organize press conferences when appropriate; work with partners when applicable.
РОЕ	(5.5) Organize media visits to the sanctuary, including research cruises and site visits, and staff visits to media outlets, including editorial boards, local radio talk shows, and community cable television, through a scheduled sanctuary speakers bureau.

РОЕ	(7.2) Assess needs of the educational community for sanctuary-related materials and programs, and develop curricular products and programs as deemed appropriate to further NOAA and sanctuary goals for heightened understanding of sanctuary resources, uses, science, management issues and marine careers. Link materials to state and national standards wherever possible, and provide a mechanism for assessment. Products and programs may include, but are not limited to, image libraries, web-based technical information, activity lesson plans that supplement textbook information and marine education programs like "The Voyage of the Mimi" and Geographic Information Systems (GIS) data. The sanctuary should explore the possibility of hands-on opportunities such as service learning projects, volunteer opportunities, student leadership conferences, field programs, career days, etc.
POE	(7.5) Incorporate all education products and programs on the sanctuary website and provide additional background materials for student and general public research and review.
POE	(8.2) Fund summer internships for education, outreach, marine management, maritime heritage, GIS, and other sanctuary-related disciplines.
РОЕ	(8.5) Provide speakers and/or background information on the sanctuary, its resources and management issues to marine management, marine science, marine trades and maritime archaeology courses.
WQ	(A.1.1) Establish a Science and Technical Committee to review the monitoring program and related collaborations.
WQ	(A.1.2) Characterize the contaminant loading to the sanctuary from sources.
WQ	(A.1.3) Evaluate the MWRA outfall as a source of contaminants and other pollutants.
WQ	(A.1.4) Identify specific monitoring questions and develop a monitoring and research plan around these questions, including to what extent do the MWRA outfall, other outfalls, and other sources of pollution (e.g., plastics, floatables, and atmospheric deposition) impact the sanctuary (also see Activities B.1.3 and B.3.3).
WQ	(A.1.8) Encourage research and monitoring of endocrine disrupters and their effects on sanctuary resources.
WQ	(A.2.3) Develop a plan for integrating current OOS and other research and monitoring activities within the sanctuary water quality monitoring plan, research agenda, and other monitoring activities.

WQ	(A.3.1) Compile a list of all models (harmful algal bloom [HAB], Bays Eutrophication Model [BEM], Gulf of Maine etc.) and determine direction of these models as applied to sanctuary goals.
WQ	(A.3.2) Develop discussions around food-web models (e.g., sand lance and whales).
WQ	(A.4.2) Develop materials to facilitate understanding of the relationships between and among water and sediment quality, ecosystem assessment and ecosystem alteration.
WQ	(B.1.1) Develop guidelines on vessel discharges that recommend no discharge of black water, gray water, bilge water, ballast water, hazardous chemicals, solid wastes, and fish wastes in excess of quantities normally produced by traditional fishing methods within the sanctuary, and encourage vessels transiting sanctuary waters to abstain from dumping through voluntary compliance. Include a reporting component to provide documentation on discharge locations.
wQ	(B.1.2) Assemble a discharge working group to investigate the potential for designating the sanctuary a No Discharge Zone (NDZ) under NMSA. Compile additional background information needed to support development of No Discharge Area designation and regulations, including on-board disposal practices (including use of Advanced Wastewater Treatment Facilities) and impacts to resources from black water, gray water, bilge water, hazardous wastes, solid wastes, desalination effluent, and ballast water. Coordinate with U.S. EPA in the development of regulations to ensure consistency with state NDZ created under CWA 312 40 CFR 140.
wQ	(B.1.3) Develop a research program that examines the cause and effect relationship between discharges and impacts to the ecosystem. This needs to be done in conjunction with other agencies and organizations and focus on issues of highest importance (also see A.1.4 Activities and B.3.3).
WQ	(B.1.5) Encourage development of pump out facilities for both large and small vessels, and support creative solutions in ports and harbors that host vessels that visit the sanctuary.
WQ	(B.2.1) Adopt a precautionary approach and encourage prevention of introductions of invasive species through development of ballast water exchange guidelines for the sanctuary through formal Memoranda of Understanding with cruise lines and the shipping industry and other shipping related sources.

WQ	(B.3.1) Review and comment on all NPDES requests for municipal wastewater streams that may impact sanctuary waters, and require sanctuary monitoring and reporting components to any NPDES permit.
wQ	(B.3.3) Convene a focus group to determine the need for a research program that examines the cause and effect relationship between shore-based point source discharges and impacts to the sanctuary ecosystem. Other areas of discussion may be air deposition and non-point source urban runoff. This needs to be done in conjunction with other agencies and organizations and focus on issues of highest importance.
WQ	(B.4.1) Continue to work with the USCG and NOAA Hazardous Materials Office in the updating of oil spill and hazardous material spill contingency plans for the sanctuary.
WQ	(B.4.2) Work with MWRA to develop a sanctuary component to their emergency response plan for the outfall and make this information transparent to the public.
WQ	(B.4.3) Develop a monitoring program to sample sanctuary waters after pollution events such as MWRA system failures and/or storm-water overflows (incorporate this emergency monitoring within the general monitoring plan see Activity A.1.6).
IC	(6.1) Create a new webpage on the SBNMS website that serves as a clearinghouse for the public to the various agencies that regulate fishing within the sanctuary
IC	(12.3) Participate in the GOM Council and other regional initiatives regarding the coordination of the establishment of a marine protected area (MPA) network within the GOM.
MHR	(1.1) Pursuant to the mission of and in coordination with the NMHP, the SBNMS MHR Program is responsible for implementing the following strategies [to protect historic resources].
MHR	(1.2) Develop the foundation and infrastructure for a MHR program at SBNMS, including a full time maritime/marine archaeologist on staff and the familiarization of all SBNMS staff with MHR. SBNMS will also integrate the MHR program into existing natural resource protection programs.
MHR	(1.3) Incorporate the MHR Program action plan strategies and activities into the annual operating plans (AOP) of SBNMS for implementation.
MHR	(2.2) Conduct systematic surveys to locate and identify MHR.

MHR	(2.3) Assess all maritime heritage sites for their National Register of Historic Places eligibility and nominate appropriate sites to the National Register of Historic	
MIID	Places.	
MHR	(2.4) Characterize MHR within SBNMS.	
MHR	(3.6) Investigate potential for mooring system on Public Access Sites in collaboration with affected parties and regional scuba diving charter operators.	
MHR	(4.3) Improve and expand MHR information sharing and dialogue between SBNMS and applicable user groups.	
MHR	(4.9) Identify new MHR outreach and education programs.	
MHR	(5.1) Establish an inventory of shipwrecks and submerged objects, inside and outside of SBNMS boundaries, that may pose environmental threats to sanctuary resources.	
EBM	(2.2) Initiate consortium.	
EBM	(4.1) Develop an operational definition of ecological integrity.	
EBM	(4.2) Develop appropriate measures of diversity and those processes that mediate patterns of diversity.	
ЕВМ	(4.6) Establish collaborative research programs with the recreational and commercial fishing industries to help answer specific questions about the ecology of the sanctuary and its use.	
EBM	(4.8) Classify and map benthic habitats.	
EBM	(4.12) Develop an internal oceanographic circulation model.	
EBM	(4.13) Quantify pollutant loadings.	
EBM	(4.14) Establish an integrated ocean observing system.	
ЕВМ	(5.1) Establish a zoning WG to evaluate the adequacy of existing zoning schemes in SBNMS to satisfy the scientific requirements and meet the goals of EBSM and if needed, develop a modified zoning scheme (including a consideration of fully protected reserves) to meet those goals and requirements.	
ЕВМ	(5.2) Recommend implementation of a permanent ban on the exploitation of sand eels (<i>Ammodytes spp.</i>) within the SBNMS.	

EBM	(5.3) Assess and minimize bycatch and discard.	
EBM	(5.4) Evaluate the need and ability to protect an adequate forage base for species within the sanctuary.	
ЕВМ	No activity associated with strategy. Assuming Dot went in support of Strategy.	
EA	(1.1) The laying of cables and pipelines should remain a prohibited activity within the SBNMS.	
EA	(2.1) The sanctuary should work with the NEFMC and other appropriate agencies and stakeholders to set aside an area(s) within SBNMS that allows for research on topics including habitat recovery, biological succession and community ecology this action would be compensated for by a reduction of comparable area elsewhere in the WGOMHCA or other comparable area and/or measure.	
EA	(2.2) The SBNMS should investigate areas within its borders to recommend to the NEFMC as Habitat Areas of Particular Concern (HAPC) pursuant to NEFMC designation.	
EA	(2.4) The research WG recommended in Activity 2.3 should be charged with developing a research plan that focuses on the effects of varying levels of human use on the sanctuary. The sanctuary should conduct and/or encourage research resulting in a greater understanding of benthic habitat alteration and ways to mitigate its impact from mobile fishing gears. The Actions recommended under this Activity should be evaluated in light of the NMSA.	
EA	(3.1) The sanctuary should work with all parties to reduce unintended bycatch and discard of all species, in all fisheries (commercial and recreational) and all gear types.	
EA	(3.2) The sanctuary should work with all parties to understand the implications of the biomass removal of marketable species from within the sanctuary by commercial and recreational fisheries, and to ensure the biological integrity and sustainability of sanctuary waters.	
EA	(3.3) The SBNMS should work with NOAA Fisheries and the NEFMC to develop a management strategy for key prey species sufficient to maintain the integrity of the ecosystem. Prey species considered include: • Herring • Mackerel • Sand lance	

EA	(4.1) Ocean dumping, the disposal of dredged materials, and mariculture should remain prohibited activities (ocean dumping and disposal of dredged materials) and subject to regulation (mariculture) within the SBNMS.
EA	(5.1) The sanctuary should address the remaining issues assigned to the EA WG.
MME	(1.1) Maximize the degree to which entangled animals in the sanctuary are sighted.
MME	(1.3) Maximize stand-by of entangled animals.
MME	(2.1) Gear modification.
MME	(3.1) Gear modification.
MMBD	(1.1) Development of regulations governing the operation of vessels in the vicinity of whales, porpoises, and dolphins.
MMBD	(3.1) Establish a Marine Noise Consortium.
MMBD	(3.2) Development of research recommendations.
MMVS	(A.1.1) The SBNMS should be aware of the NOAA Fisheries' proposed strategy to reduce ship strike to North Atlantic right whales and how such measures would affect the sanctuary.
MMVS	(A.2.1) Development and evaluation of the SBNMS Information and Reporting Center.
MMVS	(A.2.2) The sanctuary should work with the IMO, the USCG and NOAA Fisheries to reconfigure the current TSS to reduce the potential for whale strikes by commercial vessels transiting the SBNMS.
MMVS	(A.3.2) Voluntary speed restriction for commercial vessels at night, or in reduced visibility.
MMVS	(B.1.2) Voluntary speed restriction for non-commercial shipping vessels at night, or in reduced visibility.
MMVS	(C.1.1) The sanctuary should develop regulations, in consultation with stakeholders, governing operations of whale watching vessels in the vicinity of whales, dolphins and porpoises within one year of adopting the SBNMS Management Plan, taking into consideration Options C.1.1 through C.1.6. In the meantime, the sanctuary should implement methods to enforce current guidelines

MMVS	(C.3.3) The sanctuary should have a regular presence on Stellwagen Bank.
MMVS	(C.4.2) The sanctuary should conduct a year round monitoring study that would identify every vessel type, size, and route of each vessel while in the sanctuary. This study could serve as the basis for other research projects for management practices. Additionally, the sanctuary should continue trackline survey studies to monitor the spatial and temporal distribution of whales and vessels in the sanctuary. Finally, the sanctuary should monitor trends in vessel use (vessel types and numbers using the sanctuary, new vessel designs, etc.) over years.
MMVS	(C.4.5) The sanctuary should investigate use of forward-looking sonar or other real-time detection equipment to notify vessels of whales in their path.
MMVS	(C.5.4) The Sanctuary should review how proposals occurring outside the Sanctuary may influence vessel traffic and risk of vessel strike within the Sanctuary. (e.g., the proposal to create LNG leightering stations adjacent to the western side of the Sanctuary and the potential rerouting of vessel traffic into the sanctuary.